



# I'm an APPLE

I'm an apple going through your digestive system. It all begins in the mouth. First you take a bite out of me where the saliva helps soften me up and then you chew me into a ball or bolus. This happens by the teeth chewing me up (painfully) into tiny pieces so the enzymes (amylase) can easily break me down.

Now I'm in the gullet after being forced down by muscles in the back of the throat on the way to the stomach. In the gullet, the circular and longitudinal muscle layers force me down into the stomach. This is called peristalsis.

Now I'm in the stomach. In the stomach, I am still being broken down by enzymes which are made in the gut wall or pancreas. I am then kept in the stomach for about two hours to digest the proteins by the use of hydrochloric acid which makes me and my friends very acidic so it can kill bacteria that could give you food poisoning. The protease enzyme must be able to survive these acidic conditions so they have a pH level of 2.

Now it is time to head to the small intestine but first the sphincter has to relax so we can get through. Once it relaxes, we head to the duodenum. There are more digestive juices here like that fun green liquid called bile which is made in the liver, (great at parties) which turns lipids into an emulsion of tiny pieces for easier digestion. The bile and pancreatic juice are alkaline. This is because I am very acidic and it is there to neutralise me. Here we come, ileum. The role of the ileum is to absorb the digested food and put me into the blood. Because there is such a large surface area and length in the ileum, this helps to absorb the digested me into the blood.

Unfortunately our time together is coming to an end. But, before I leave you, I have to stop at the colon. There I am stripped of all remaining liquid. After this odd process I am left as a semi solid brown piece of faeces☹. I stay at the 'five star' rectum until I am shot out the anus. I started out as a rosy red apple and ended as a smelly piece of faeces.

By James Macdonald

THE APPLE